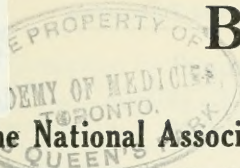


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BULLETIN

OF

The National Association for the Study and Prevention of Tuberculosis

Vol. II.

APRIL, 1916.

No. 7.

Preliminary Program—Twelfth Annual Meeting of The National Association for the Study and Prevention of Tuberculosis

General Order of Sessions

Thursday, May 11

9 A. M.

Registration at Conference headquarters, tenth floor, New Willard Hotel.

10 A. M.

Meeting of the Executive Committee of National Association, followed by meeting of Board of Directors.

1:45 P. M.

GENERAL MEETING

Address of the President.....Edward R. Baldwin, M.D.

Report of the Executive Office.....Charles J. Hatfield, M.D.

President Wilson has agreed to address the Association, if possible, either at this or the Friday noon general session.

Preliminary business of the Association.

3 P. M.

Meeting of Pathological Section.

Meeting of Sociological Section.

8:15 P. M.

Meeting of the Advisory Council.

Friday, May 12

9 A. M.

Meeting of Clinical Section.

Meeting of Sociological Section.

12 M.

GENERAL MEETING.

Business Meeting of the Association.

Reports of Committees.

Election of Directors.

2 P. M.

Meeting of Clinical Section.

Meeting of Sociological Section.

5 P. M.

GENERAL MEETING.

Discussion of the Report of the Committee on Standards for Diagnosis of Tuberculosis in Children.

7 P. M.

Meeting and Dinner of National Conference of Tuberculosis Secretaries.

(Program continued on page 2)

Are You Going?

Those who expect to attend the Annual Meeting of The National Association for the Study and Prevention of Tuberculosis at Washington will confer a great favor upon the executive office by sending in a notice to this effect at once. Arrangements for the meeting can be considerably facilitated if those who expect to go will do this.

General Information About Annual Meeting

MEETINGS: All sessions will be held in the New Willard Hotel. Information as to place may be secured from the Registration Desk on the tenth floor.

HOTELS: All members are expected to make their own hotel arrangements and are advised to procure accommodations in advance. The following hotels are recommended:

New Willard Hotel, Fourteenth Street and Pennsylvania Avenue. European plan, \$2.50 per day and upward.

The Raleigh, Twelfth Street and Pennsylvania Avenue. European plan, \$2.00 per day and upward.

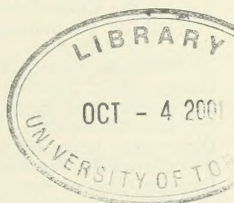
The Shoreham, Fifteenth and H Streets. European plan, \$2.50 per day and upward.

The Ebbitt, Fourteenth and F Streets. American plan, \$2.50 per day and upward.

The Powhattan, Eighteenth and H Streets. European plan, \$1.50 per day and upward.

RAILROAD RATES: Owing to action of the Trunk Line Association it has not been found feasible to obtain reduced rates for those attending this meeting.

Those who plan to attend the National Conference of Charities and Corrections at Indianapolis can easily arrange to be in that city by Sunday noon, or even Saturday noon, if they do not attend the secretaries' dinner on Friday night.



BULLETIN OF
THE
NATIONAL ASSOCIATION FOR
THE STUDY AND PREVENTION
OF TUBERCULOSIS

Published Monthly
In the Interest of Workers Engaged in the
Anti-Tuberculosis Movement by
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OFFICERS OF THE ASSOCIATION

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Dr. Theodore B. Sachs

Resolutions bearing upon the tragic death of Dr. Theodore B. Sachs, the president of The National Association for the Study and Prevention of Tuberculosis, were adopted by the executive committee immediately following the announcement of the death. The following are the resolutions:

WHEREAS, in the death of Dr. Theodore B. Sachs The National Association for the Study and Prevention of Tuberculosis has suffered the loss of its honored president, and the entire anti-tuberculosis movement has lost a valued worker; and

WHEREAS, in a spirit of self-sacrifice and devotion to the cause of humanity he has given the best of his life to the anti-tuberculosis campaign; and

WHEREAS, his signal services in tuberculosis work, both as a clinician and an administrator, have proven of inestimable worth to the people of the United States and to the world; be it

RESOLVED, That The National Association for the Study and Prevention of Tuberculosis, through its executive committee, deploras its own loss of a member, director and president, and expresses its deep and sincere appreciation of the valuable services Dr. Sachs has rendered; and be it further

RESOLVED, That a copy of these resolutions be read at and spread upon the minutes of the Twelfth Annual Meeting of The National Association for the Study and Prevention of Tuberculosis, and that they be transmitted by the executive secretary to the family of Dr. Sachs.

An article on the life and work of Dr. Sachs and dealing especially with the political events leading up to his death will be published in the May number of the *Journal of the Outdoor Life*.

Advisory Council

Livingston Farrand, M.D., Boulder, Colo., Chairman.

Thursday, May 11, 8:15 P. M.

"Housing and Tuberculosis,"

Address by the Chairman.

Address by Lawrence Veiller, Secretary, National Housing Association, New York.

General Discussion.

Clinical Section

Thomas McCrae, M.D., Philadelphia, Chairman.

Elmer N. Funk, M.D., Philadelphia, Secretary.

Friday, May 12, 9 A. M.

Address of the Chairman: "The Separation of Tuberculosis from General Medicine."

"The Relation of the General Hospital to Tuberculosis," George Dock, M.D., Dean, Washington University Medical College, St. Louis.

"The Education of the Medical Student in Tuberculosis," W. S. Thayer, M.D., Johns Hopkins Medical School, Baltimore.

Discussion opened by Hermann M. Biggs, M.D., New York; Wm. Charles White, M.D., Pittsburgh, and H. R. M. Landis, M.D., Philadelphia.

"Hemoptysis as a Symptom," Frederick T. Lord, M.D., Boston.

"Pulmonary Tuberculosis Often of Secondary Importance to Other Pathological Conditions," Charles D. Parfitt, M.D., Medical Director, Calydon Sanatorium, Gravenhurst, Ont.

"Results Obtained by the Class Method of Home Treatment in Pulmonary Tuberculosis, During a Period of Ten Years," Joseph H. Pratt, M.D., Medical Director, Emanuel Church Tuberculosis Class, Boston.

Friday, May 12, 2 P. M.

"The Early Diagnosis of Pulmonary Tuberculosis by X-Rays":

"The Clinical Aspect," Charles L. Minor, M.D., Asheville.

"The Roentgenological Aspect," Frederick H. Baetjer, M.D., Baltimore.

Discussion opened by Lawrason Brown, M.D., Saranac Lake; G. E. Pfahler, M.D., Philadelphia; Gerald B. Webb, M.D., Colorado Springs; and Frederick H. Heise, M.D., Saranac Lake.

"Non-Tuberculous Lung Lesions," Louis V. Hamman, M.D., Phipps Dispensary, Johns Hopkins University, Baltimore.

"Care of the Teeth in Tuberculosis," David R. Lyman, M.D., Medical Director, Gaylord Farm Sanatorium, Wallingford, Conn.

"Rest of the Individual Lung by Posture," Gerald B. Webb, M.D., A. M. Forster, M.D., and F. W. Houck, M.D., Colorado Springs.

"Gastric Function in Tuberculosis," H. K. Mohler, M.D., and E. H. Funk, M.D., Philadelphia.

"The Relation of Tuberculosis of the Bronchial Glands to the Diagnosis of Pulmonary Tuberculosis," Mary E. Lapham, M.D., Medical Director, Highlands Sanatorium, Highlands, N. C.

"The Definite Therapeutic Value in Tuberculosis of the Ingestion of Tincture Iodine U. S. P. in Progressively Increasing Doses," John Ritter, M.D., Rush Medical College, Chicago.

Pathological Section

Gerald B. Webb, M.D., Colorado Springs, Chairman.

S. A. Petroff, Saranac Lake, Secretary.

Thursday, May 11, 2 P. M.

"Some Derivatives of Methylene Blue in Tuberculosis Chemotherapy," Lydia M. DeWitt, M.D., Chicago.

"Influenza Bacilli in Sputum of Consumptives," Mary L. Hamblett, M.D., Rhode Island State Sanatorium, Wallum Lake, R. I.

"Complement Fixation in Diagnosis," H. J. Corper, M.D., Chicago Municipal Tuberculosis Sanitarium, Chicago.

"A Clinical and Experimental Study of Complement Fixation in Tuberculosis," S. A. Petroff, Trudeau Sanatorium, Saranac Lake.

"Complement Fixation: Some Clinical Observations," Alfred Meyer, M.D., New York.

"Dialo and Urochromogen Findings in the Tuberculous," H. J. Corper, M.D., F. F. Callahan, M.D., Chicago Municipal Tuberculosis Sanitarium, Chicago; and M. I. Marshak, M.D., Edgewater, Colo.

"Streptothricosis," William M. Stockwell, M.D., Supt., Fairfield County State Sanatorium, Shelton, Conn.

"Studies in Tuberculin Hypersensitiveness as Determined by Intracutaneous Tests of Different Dosages," Myer Solis-Cohen, M.D., Philadelphia.

"The Occurrence of Living Tubercle Bacilli in River Water Contaminated by Sewage from a Health Resort," S. A. Petroff, Trudeau Sanatorium, Saranac Lake.

"Blastomycosis of the Lung" (case report), H. R. M. Landis, M.D., and Paul A. Lewis, M.D., Philadelphia.

"The Influence of Certain Organic Substances on the Growth of the Tubercle Bacillus," Paul A. Lewis, M.D., and Robert B. Krauss, Phila.

"Report of the Committee on Research," Edward R. Baldwin, M.D., Chairman, Saranac Lake.

Sociological Section

Seymour H. Stone, Boston, Chairman.

Walter D. Thurber, Chicago, Secretary.

Thursday, May 11, 2 P. M.

"Inter-State Control of the Tuberculosis Problem," Homer Folks, Secretary, New York State Charities Aid Association, New York.

Hon. William Kent, Congressman from California.

Miss Gertrude Vaile, Department of Social Welfare, Denver, Colo.

Discussion: George M. Kober, M.D., Washington, D.C.; Miss Edythe L. M. Tate, Sacramento, Calif.; Thompson Frazer, M.D., Asheville; and Livingston Farrand, Boulder, Colo.

Friday, May 12, 9 A. M.

"Dispensary Standards," Miss F. Elisabeth Crowell, Executive Secretary, Association of Tuberculosis Clinics, New York.

Discussion: John Ritter, M.D., Chicago; Eugene R. Kelley, M.D., Boston; Dunning S. Wilson, M.D., Louisville, Ky.; Borden Veeder, M.D., St. Louis.

"Pay Clinics for Tuberculosis," Michael M. Davis, Jr., Ph.D., Director, Boston Dispensary, Boston.

"Colored Physicians and Nurses for Colored Patients," H. R. M. Landis, M.D., Clinical Director, Henry Phipps Institute, Philadelphia.

Friday, May 12, 2 P. M.

"Health Insurance," John B. Andrews, Secretary, American Association for Labor Legislation, New York.

Discussion: James Jenkins, Jr., Brooklyn; Hoyt E. Dearholt, M.D., Milwaukee.

"Tuberculosis Relief Associations," Charles J. Hatfield, M.D., Executive Secretary, The National Association for the Study and Prevention of Tuberculosis, New York.

Discussion: David R. Lyman, M.D., Wallingford, Conn.; George W. Perkins, Chicago; James Minnick, Chicago.

"Present Status of Medical Examination of Employees," Harry E. Mock, M.D., Medical Director, Sears, Roebuck & Co., Chicago.

Discussion: John H. Lowman, M.D., Cleveland.

National Conference of Tuberculosis Secretaries

Seymour H. Stone, Boston, President.

Walter D. Thurber, Chicago, Secretary.

Dinner Session: (Time and place to be announced later).

Advisory Council Meeting

As part of the regular program for the annual meetings of the National Association, it is customary to hold a special session of the Advisory Council. The original function of the Council, as its name implies, was to act in an advisory capacity with the Association on matters relating to internal or external policy. In the course of time, however, the Advisory Council has become little more than an annual forum for the discussion of subjects related to the anti-tuberculosis campaign and is now recognized as a section of the regular meeting, akin to the sociological, clinical and pathological sections. Its most valuable service is in that it allows for, without seeming inconsistency, the introduction of discussions on subjects not directly dealing with the study or administration of tuberculosis activities, but vital nevertheless because of their close relationship to this field.

This year the subject to be discussed is of great importance: "Housing in Its Relation to Tuberculosis." The chairman of the Council is Dr. Livingston Farrand, president of the University of Colorado and formerly executive secretary of the National Association. The National Housing Association will be represented in the discussion by its secretary, Lawrence Veiller.

A cordial invitation is extended to every one to attend this meeting, which will be held on Thursday evening, May 11, at 8.15 o'clock on the tenth floor of the New Willard Hotel. Among those who are especially invited, in accordance with the by-law of the Association creating the Advisory Council are:

Officers or representatives appointed by various recognized state associations for the prevention of tuberculosis.

Officers or representatives of various recognized local or municipal or county associations for the prevention of tuberculosis.

Members of the medical staff of every public hospital or sanatorium or other institution for the exclusive care of tuberculous patients.

Representatives from the boards of trustees or other executive authorities of approved hospitals or sanatoria for the exclusive care of tuberculous patients.

Representatives of recognized, incorporated charitable societies or associations.

The president or medical officer of the Health Department of any state or any city with a population of more than twenty thousand.

Action of National Association Board

At the meeting of the Board of Directors of the National Association for the Study and Prevention of Tuberculosis the following action was taken on various matters of general interest to members of the Association:

Dr. James Alexander Miller was asked, as chairman of a special committee, to prepare a Handbook for Medical Practitioners Dealing with Tuberculosis. The other members of the committee who will assist him are Dr. Louis V. Hamman; Dr. John B. Hawes, 2d; Dr. Lawrason Brown; and Dr. William Charles White.

The board took no direct action on the Kent Federal Subsidy bill, but went on record as approving the action of the Executive Committee favoring a division of tuberculosis in the United States Public Health Service.

The new budget of the Association, amounting to \$44,280, was adopted. Among other things the budget provides for an additional secretary to serve either in general field work or to specialize in hospital work.

Dr. Dunning S. Wilson, Louisville, Ky.; Dr. John H. Lowman, Cleveland, O.; and Mrs. O. B. Colquitt, Dallas, Tex., were elected to fill vacancies in the board.

The board went on record as endorsing the general principle of health insurance, and proposed state commissions to study the matter in New York, New Jersey, and Massachusetts, where bills have been introduced. A special committee, appointed to study these bills and report at the next meeting of the board, consists of John M. Glenn, chairman; Dr. Hermann M. Biggs; and Dr. Lee K. Frankel.

A special committee was also appointed to study and report on the control of Interstate Traffic in Dairy Products Which May be Infected with Tubercle Bacilli. This committee consists of Dr. Hermann M. Biggs, chairman; Dr. Theobald Smith; Dr. E. C. Schroeder; Dr. M. P. Ravenel; and Dr. W. A. Evans. Resolutions relating to this problem were also adopted.

An Invitation

Those who plan to attend the annual meeting of the National Association for the Study and Prevention of Tuberculosis at Washington, D. C., May 11th and 12th, coming from points west of or near Chicago are invited by Julius Rosenwald, president of Sears, Roebuck & Company, to visit and inspect the plant of that company. Since the medical inspection of employees in this concern has been developed under Dr. Mock to a high degree of efficiency, anti-tuberculosis workers will find this and other features of the plant of special interest. In order that the company may make such provisions as may be necessary those who intend to make this trip should notify in advance Dr. Harry E. Mock, Sears, Roebuck & Company, Chicago.

Fall Conference Dates

Five Sectional Conferences will be held next fall under the auspices of The National Association for the Study and Prevention of Tuberculosis.

The New England Conference will meet in New Haven, Conn., October 12th and 13th; the North Atlantic Conference at Newark, N. J., October 20th and 21st; the Southern Conference at Jackson, Miss., October 27th and 28th; the Mississippi Valley Conference at Louisville, Ky., October 4th, 5th, and 6th; and the Southwestern Conference at Albuquerque, N. Mex., October 12th and 13th.

The states comprised in the New England Conference are Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. The North Atlantic Conference states are New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia. The Southern Conference states are, Virginia, West Virginia, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, and Louisiana. The Mississippi Valley Conference states are, Michigan, Ohio, Indiana, Kentucky, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Arkansas, Oklahoma, Kansas, Nebraska, North Dakota, and South Dakota. The Southwestern Conference will take in the states of Texas, New Mexico, Colorado, Utah, Arizona, Nevada, and California.

Anti-tuberculosis workers are urged now to make plans to attend the conference in their district or the one nearest to them.

Public Health Publicity

How to get publicity is one of the things every anti-tuberculosis worker should know. In a special series of articles being published in the *American Journal of Public Health* E. A. Moree tells how to do this. Mr. Moree's six articles deal with the what, the why, the how, the what not, the when not, and the why not of public-health publicity as the art of focusing public opinion.

The titles of his six articles are "What Is Public Health Publicity," "Organizing for Health Publicity," "Making a Meeting Effective," "Newspaper Publicity," "Paid-for Advertising," and "Applying Printer's Ink to Social Sores." Both as assistant secretary of the New York State Charities Aid Association, publicity expert of the New York State Department of Health, and as a practical newspaper editor and publicist, Mr. Moree is eminently qualified to speak with authority on all of these subjects.

The first of these articles was published in the *American Journal of Public Health* for January, 1916, and the second in March. The others will appear in later numbers. Copies or subscriptions may be obtained from the office of the Journal, 755 Boylston Street, Boston; price 30c. per copy; \$3.00 per year.

New Publications Free to Members

Three new publications of the National Association, each of special importance, will be ready for delivery during the months of May and June. Every member of the Association in good standing is entitled to a free copy of each of these books. The publications are:

(1) "The Tuberculosis Directory," containing a list of anti-tuberculosis agencies in the United States and Canada, including sanatoriums and hospitals, boarding-houses, open-air schools, dispensaries, associations, state and local legislation and boards of health, and other activities. The book will be as complete as possible up to April 1, 1916. While the price for the book to non-members has not yet been fixed, it will probably be 50c. postpaid.

(2) "Working-men's Organizations in Local Anti-Tuberculosis Campaigns." This is a study of a number of several typical experiments that have been tried for the purpose of interesting working-men especially in the tuberculosis movement. Such organizations as the free-bed-fund associations of Conn.; the "Overlook Movement" of Worcester, Mass.; the hospital organizations of Albany and Brooklyn; and the Trades Union Associations of Buffalo and Newark are carefully described and compared. The object of the pamphlet is to offer concrete suggestions for working-men's organizations in co-operation with anti-tuberculosis associations anywhere in the United States. The price of this pamphlet to non-members has not yet been fixed, but it will probably not exceed 20c. for single copies.

(3) "Dispensary Methods and Procedure," by Miss F. Elisabeth Crowell, executive secretary of the New York Association of Tuberculosis Clinics. Miss Crowell has brought together in this study the combined experience of more than one hundred representative tuberculosis clinics in every part of the United States. She has analyzed this data in the light of years of intimate contact with tuberculosis clinic work, and has prepared a report which will serve for years to come as a general handbook for clinic workers. This study is unique in many ways, not the least of which is that it is the only one of its kind in existence. Those already in clinic work or those who contemplate establishing clinics will find this study of utmost value. The price for this report to non-members cannot be determined at this time.

Members of the Association who wish any or all of these reports are asked to file orders at an early date, both for the purpose of saving postage to the executive office and also for the purpose of helping the office to determine the size of editions needed. Orders will be filled promptly, as soon as the books are ready.

Medical Notes, Abstracts and Reviews

The object of this monthly department of the "Bulletin" is to put physicians in easy touch with medical and scientific literature, both American and foreign, including magazine articles, books, reports, etc., that bear directly or indirectly upon the treatment and prevention of tuberculosis. This is not a department for news and editorial comment. Its function is rather that of a catalogue or a librarian. Any material for this department of the "Bulletin" should be sent to Dr. George Mannheimer, 41 West 31st Street, New York, who has been chosen medical editor.

Readers of the "Bulletin" who wish to have copies of the publication sent to physicians working in dispensaries, sanatoria, laboratories, and in other forms of tuberculous activities, who are not now receiving it, should send in such lists of names to the National Association. The "Bulletin" is sent free to those who are engaged in anti-tuberculosis work.

Report of The Committee on Standards of Diagnosis of Pulmonary Tuberculosis in Children

Editorial Note

At the meeting of the Board of Directors of The National Association for the Study and Prevention of Tuberculosis on October 16, 1915, a report of a committee on Standards of Diagnosis of Pulmonary Tuberculosis in Children from the New York Association of Tuberculosis Clinics was submitted with the suggestion that it be adopted by the National Association as a uniform method of diagnosis throughout the United States. The Board of Directors of the National Association appointed a committee to consider the standards submitted and to report back to the board upon their adoption. This committee, consisting of Dr. James Alexander Miller, New York, chairman; Dr. B. H. Waters, New York, secretary; Dr. John H. Lowman, Cleveland; Dr. Henry I. Bowditch, Boston; Dr. John Howland, Baltimore; Dr. I. Abt, Chicago; Dr. O. W. McMichael, Chicago; and Dr. G. L. Bellis, Milwaukee, submitted the report given below at the meeting of the board on March 11, 1915. It was then decided to have the report printed and distributed to members of the Association and to have it presented for discussion at the next annual meeting of the Association. A special session of the Association will be held, therefore, on Friday, May 11, at five o'clock for this purpose. Medical members who attend the meeting are urged to be in readiness to offer suggestions on these standards. Those who do not attend may submit reports in writing to the secretary of the committee, Dr. B. H. Waters, 40 East 41 Street, New York City.

TO THE DIRECTORS OF THE NATIONAL ASSOCIATION FOR THE STUDY AND PREVEN- TION OF TUBERCULOSIS.

Gentlemen:

At your meeting on October 16, 1915, this Committee was appointed to consider the approval and adoption of certain standards for the diagnosis of tuberculosis in children, which were set up by a committee, appointed for this purpose, of the Association of Tuberculosis Clinics of New York City.

A copy of these proposed standards was sent to each member of the Committee and from each replies have been received which approve of their essential requirements.

They have been so amended, in form and substance, as to conform with the criticisms and suggestions offered.

Your Committee therefore recommends the adoption of these standards, as follows:

STANDARDS FOR THE DIAGNOSIS OF TUBERCULOSIS IN CHILDREN

I. NECESSARY INQUIRIES AND DETERMINATIONS FOR THE DIAGNOSIS OF TUBERCULOSIS.

History

Exposure (especially if prolonged)
Delayed convalescence from illness
Malnutrition
Underweight for height or loss of weight
Cough
Expectoration
Hemorrhage
Pain
Pleurisy
Dyspnoea
Night sweats
Digestive disturbances
Ear discharge

Constitutional Symptoms

Malnutrition
Underweight for height
Elevation of temperature, acceleration of pulse, rapid respiration
Cough
Expectoration
Hemorrhage
Pain
Pleurisy
Dyspnoea
Night sweats
Digestive disturbances

Physical Signs

Persistent and persistently localized rales
Additional abnormal signs elicited by the usual methods of examination
Any glandular, joint bone, muscular, cutaneous, ocular, or aural abnormalities

II. ESSENTIALS FOR THE DIAGNOSIS OF PULMONARY TUBERCULOSIS.

1. Distinct persistent and persistently localized adventitious signs (rales) in the chest.

Location:

a. About the nipples—that is, anywhere between the fourth and sixth ribs, the bor-

der of the sternum and the anterior axillary line.

b. Anywhere along the border of the sternum, or in the region of the apices, as in adults. These, however, are infrequently found.

These rales may be heard during inspiration or expiration, or after a cough. In many instances they can be elicited only by the cough.

c. Rales limited to a considerable part or the whole of any one lobe. If these are associated with a positive tuberculin test and persist over a considerable period of time, they should be regarded as tuberculous, despite the fact that in association with enlarged tonsils or adenoids similar signs may occur. However, in the absence of any means of definitely interpreting these signs, and particularly with a history presenting evidence of exposure to tuberculosis, it is wise to give children the benefit of the doubt, and to consider them tuberculous.

2. Temperature over 99 by mouth, constant, recorded twice weekly for one month, and not otherwise explained.

3. A positive tuberculin test.

Exceptions:

In the absence of adventitious signs a diagnosis of tuberculosis may be made in the following instances:

(1) Given a positive tuberculin reaction, with an unquestioned and otherwise unexplained hemoptysis and with or without a definitely positive radiograph, the diagnosis of pulmonary tuberculosis is to be made.

(2) Given a positive tuberculin reaction in children under three or four years of age, even without constitutional symptoms, and in older children with frequent cough or rapid pulse or fever, in addition to a radiograph which shows unmistakable mottling well into the pulmonic fields without any sharp outline suggestive of calcification, a diagnosis of pulmonary tuberculosis is to be made.

Notes:

(1) Cough will be present in most instances, but its absence does not negative a diagnosis of tuberculosis when the essentials above mentioned are present.

(2) A Wasserman test should be made for all patients having a suspicious history or symptoms.

(3) No patient with fever and persistent physical signs should be considered free from tuberculosis until the tuberculin test has given a negative reaction three successive times. In the interval patients are to be considered as "under observation."

(4) Examiners are reminded that undue importance should not be ascribed to the slight vocal intensification and respiratory modifications, or to slight alterations in the percussion note, so frequently present in children, especially at the apices, unless they are persistent.

III. ESSENTIALS FOR THE DIAGNOSIS OF OTHER FORMS OF TUBERCULOSIS.

To determine the presence of tuberculosis there must exist: suggestive physical signs or constitutional symptoms or both (see I, page 5), negative Wasserman and positive tuberculin reactions.

Note:

(1) Some conditions of glandular enlargement, even with positive tuberculin and negative Wasserman reactions, will require the elimination, by further clinical examinations, of lymphadenoma, adeno-sarcoma, or other adenopathies.

IV. SUSPECTS.

To determine suspects physical signs may be absent or indefinite, but there must exist one or more suggestive constitutional symptoms or items of the history (see I, page 5), and a negative Wasserman reaction.

JAMES ALEXANDER MILLER,
Chairman.
BERTRAM H. WATERS,
Secretary.

The Urochromogen Reaction.—The number of tests made by Burgess in 171 advanced cases of tuberculosis cases was 469; ninety of them positive. In studying 650 cases of non-tuberculous disease, 1,030 tests were made, only twenty-six of them being positive. In non-tuberculous cases its prognostic value is apparently slight, but in Tb. Weisz believes that a positive test persisting in spite of treatment indicates a hopeless condition, while a persistently negative test is favorable. Burgess' study seems to agree with the above. His conclusions are: "1. The urochromogen reaction is of no value in determining the prognosis in diphtheria, scarlet fever, and measles. 2. In advanced tuberculosis, a positive reaction indicates a severe and actively progressing lesion which will probably lead to death in from three to six months. 3. In advanced tuberculosis, a negative reaction is of no value."—*The Urochromogen Reaction as an aid to prognosis in pulmonary Tb. and other diseases, A. M. Burgess, Jour. A. M. A., Jan. 8, 1916.*

Urochromogen Reaction.—The test is not conclusive and should be used only as a check on the clinical work.—*Urochromogen reaction in pulmonary Tb., Max Biesenthal, Ill. Med. Jour., Nov., 1915.*

Diazo and Urochromogen Reactions.—The following conclusions can be drawn from this work done at the Leahi Home, Honolulu.

1. The only favorable change from normal (both tests absent) is to a negative diazo and positive urochromogen.

(This would also mean that at an original examination it is the only favorable deviation from normal.)

2. A change from either negative diazo to either positive diazo is most unfavorable.

3. The appearance of both reactions is of most grave portent. Such patients generally die.

4. When there is a change from a positive diazo and a negative urochromogen the only favorable one is a reversal (that is, to a negative diazo and positive urochromogen).

When the change is to positive to both tests a fatal issue is prognosticated. On the other hand, a change to normal (contrary to what we would expect) is of very grave prognosis. If the urochromogen reaction does not appear concomitantly with the disappearance of the diazo (or at least in a day or two) the prognosis is of the worst.

5. The disappearance of the diazo reaction (when both tests have been positive) has not been observed as heralding a fatal issue.

6. The disappearance of the diazo may be grave or favorable (a corollary to No. 4)—grave if the urochromogen does not take its place, favorable if it does.

7. The urochromogen reaction is probably of little value as a contraindication to tuberculin treatment, and should it be of any value at all, the probabilities are that other factors show such treatment to be contraindicated better and earlier than the urochromogen reaction.

8. This also applies to the diazo reaction as a contraindication to treatment.

9. Should the urochromogen reaction eventually prove of any value in the tuberculin treatment, I believe it will be for a diametrically opposed purpose to that referred to (as a contraindication to beginning tuberculin treatment); in other words, its presence may be a valuable contraindication to discontinuing tuberculin treatment in cases to which all other signs point as arrested. On this point I have not sufficient material as yet to say definitely. I can only state that it appears here to be of value, and I hesitate now to discontinue tuberculin in arrested cases which show this reaction.—*The Diazo and Urochromogen reactions in pulmonary Tb., A. N. Sinclair, Jour. A. M. A., Jan. 22, 1916.*

Pott's Disease.—The operative treatment of Tbc. spondylitis was introduced only within the last four years. Previously the treatment was limited to external fixation by apparatus or splints. The securing of a firm bony ankylosis is the best insurance against the recurrence of the symptoms in spinal tuberculosis. Under the old methods this was only secured after a long period and with a re-

sulting great deformity in the majority of cases. For the purpose of hastening this ankylosis the Albee and Hibb's operations were introduced and the remarkable results reported excited much attention. Wolcott sent out from the Hospital for the Ruptured and Crippled in New York a questionnaire to about seventy-five surgeons who had had more or less experience with these operations and a report of their results was requested. Postoperative complications were also inquired about and their opinion of the surgical value of the method desired. The summary of the answers is given. Excluding the reports of Albee and Hibbs, some record was obtained of 286 cases, 73 per cent. of which received benefit, nineteen cases were too recent to report, and six have been lost track of. There were thirty deaths, but in six of these the disease was reported as arrested at the time of death. Of the sixteen surgeons reporting, twelve considered postoperative support necessary and considered the operative procedure as a most valuable aid to the treatment of Pott's disease in selected cases. Four considered the post-operative support unnecessary, after the period of recumbency, accepting Dr. Albee's idea that a certain amount of motion would stimulate and hasten the formation of ankylosis. One surgeon reported uniformly unsatisfactory results, so far as the abbreviation of the period of treatment was concerned. The article is intended only as a preliminary report, but after a careful consideration of the facts Wolcott thinks we might safely deduce that without doubt the operations shorten the treatment of tuberculosis of the spine. By hastening the ankylosis the likelihood of increase of deformity is lessened. The operations are undoubtedly best adapted to cases involving the cervicodorsal, dorsal, or dorsolumbar regions. Ankylosis of several vertebrae in these regions is not associated with any serious limitation of motion if unattended by marked deformity. On the other hand, as about 75 per cent. of cases involving the cervical and lumbar regions develop but slight deformity when treated by the older methods, one should not hasten to advise operation in either of those regions, especially in children. The general opinion of the majority of replies seems to be that the operation should be considered as only a part of the treatment and that post-operative support should be continued until all signs of active disease have disappeared.—*Pott's Disease Treated by Operation: A Report of 682 Cases, W. E. Wolcott, Jour. A. M. A., Jan. 8, 1916.*

Treatment of tbc. Disease of the Spine.—Early recognition of the disease is of utmost importance, so that treatment may be begun before there are three or four vertebrae destroyed. In the early stage the child should be on his back in a surgical bed which does not sag in the middle. Maintenance of this position will usually be sufficient if the disease is below the eighth dorsal vertebra, but in mid-dorsal or cervical disease an extension apparatus, like Sayre's halter, is necessary. It is also necessary to prevent motion by means of an apparatus which can be improvised from gas-pipes. All clothing must embrace this frame in order to prevent moving the child about. When the child is

turned on his back he should be lifted slowly by head and feet, while traction is being maintained to avoid motion of the spine. In the acute and chronic stage the patient should have such fixation as will allow of ambulatory treatment. But this is called for only when the fright of motion, pain, and rigidity of the muscles have disappeared. In the lower lumbar region, however, ambulatory treatment is of doubtful value, since proper fixation would include immobilization of the thighs.

Abscess coming from tbc. bone *should be left alone*, unless there are pressure symptoms or mixed infection from within or if it causes discomfort.

In paraplegia emphasis is laid on spinal extension. The prognosis of this condition is good in the young, but in adults this is not always true even with the best of extension. Laminectomies and osteoplastic resections have been done with little good results.

The surgical treatment of Pott's disease is represented by the operations of Albee and Hibbs, the former consisting of the interposition of a bony splint between the split spinous processes; the latter, of stripping of the periosteum from the spinous processes and curetting the articular processes. These operations hasten ankylosis of the affected vertebrae, which would otherwise take a few years. They are therefore of much value.

Discontinuance of treatment should be begun only when there is no longer active disease, when the callus is sufficiently strong to give support, and when there is no more pain, tenderness, or rigidity. Removal of the jacket is then done gradually, while the patient is still kept under observation for a number of months.

Treatment of tuberculous disease of the spine, H. B. Thomas, III. *Med. Jour.*, Nov., 1915.

Crippled Tbc. Children.—A case of Tb. of the spine with deformity and psoas abscess should be kept recumbent, the spine immobilized and gradually hyperextended. The spasm of the psoas muscle should be overcome. For the spine the "wheelbarrow" splint is the best, and for the thighs a posterior splint. To prevent drop-foot, use adjustable foot-pieces. The psoas abscess is carefully aspirated, the fibrous wall not being disturbed. The treatment is continued until the absence of spasm, rigidity, pain, and tenderness shows that the disease is arrested. There should be no gross deformity, signs of cachexia, or of abscess even on X-ray examination. In neglected cases with considerable deformity the treatment depends on whether the process is active, or arrested and ankylosed. In the first instance the treatment will be the same as outlined; in the second it is unwise and dangerous to attempt correction of the deformity, as this may light up the disease. The deformity can, however, be materially lessened by the correction of the compensatory curves which formed above or below the diseased vertebra. For this the patient is suspended by the head and a plaster jacket is applied. This not only lessens the deformity, but improves the patient's general condition by returning the displaced viscera nearer to their original position, thus improving their impaired function.—*Crippled tuberculous children*, H. J. Gawwin, *British Jour. of Tb.*, Jan., 1916.

Laryngeal Tb. at Autopsy.—A study of the gross lesions of 100 larynges taken from patients dying at the Henry Phipps Institute, Philadelphia. The larynx was not fresh, but was hardened in formalin and alcohol. The upper areas and outer portions were first examined, then it was split anteriorly and the interior examined. Finally it was split posteriorly and sections taken from the epiglottis, aryteno-epiglottic folds, arytenoids, vocal cords, ventricular bands, and interarytenoid space. The microscopic study of these specimens will be reported at some future date.

Of the 100 cases 68 were males and 32 females. There are, however, twice as many male as female patients at the institute. Eighty-three cases had definite gross involvement, 4 were doubtful. Of these the epiglottis was the most frequently involved—59 times. The site of predilection was the laryngeal surface and the upper edge. Fifty-eight cases showed lesions in the aryteno-epiglottic folds, 57 bilaterally. This is a late manifestation, and the folds are never the seat of the primary involvement of the larynx.

In 57 cases there were lesions of the arytenoid cartilages, bilateral in all. In some, however, there was more involvement of one side than of the other.

The interarytenoid space was infiltrated in 47 cases. In 2 more cases there were small submucous abscesses. The vocal cords were involved 49 times. The lesions were bilateral 42 times, unilateral 7 times.

Tb. of the ventricular bands was present in 42 cases, 38 times on both sides. This was always accompanied by Tb. elsewhere in the larynx.

The author classifies the lesions as ulceration, superficial, and deep, with or without infiltration.—*The Larynx in 100 Cases Dying of Pulmonary Tuberculosis. A Clinical Postmortem Study*, G. Fellerolf, *Laryngoscope*, XXVI, No. 1, 1916.

Lupus of the Larynx.—Lupus of the larynx in a patient 38 years of age with advanced pulmonary Tb. There were skin lesions present on which the diagnosis of lupus had been made. The patient stated that these lesions antedated the throat symptoms. These were recurring attacks of burning and itching in the throat, moderate cough, later hoarseness, and slight pain on speaking. There was typical lupus of the skin and lesions of the nasal and buccal mucous membrane. The epiglottis was thickened and showed an irregular V-shaped loss of tissue that amounted to about one-third of its extent. The edges of this tissue defect presented the appearance of an indolent and sluggish ulcer. There was infiltration of the left cord and ventricular band with superficial ulceration.

After five months in the tuberculosis hospital without local treatment to the larynx there was a tendency to healing. The infiltration of the left cord and ventricular band had disappeared, the thickening of the epiglottis was less marked, and the edges of the tissue defect were cleaner. There were no symptoms referable to the larynx.

The diagnosis of lupus was based on the painless, indolent character of the lesion, the tendency to spontaneous healing, and the presence of lupus on the skin. Whether the lupus of the skin or of the mucous mem-

branes was the primary lesion the author finds himself unable to state.—*Lupus of the Larynx*, G. W. Stimson, *Laryngoscope*, XXVI, No. 1, 1916.

Treatment of Laryngeal Tb.—Primary laryngeal Tb. is rare. Besides being secondary to Tb. of the apices of the lungs, it follows Tb. of the tonsils and adenoids. The hygienic treatment should include permanent residence at a high, dry, germ-free, timbered locality, where the temperature is equable—between 50 and 60 degrees F.—and where there is plenty of sunshine. The diet should be liberal, but no "stuffing" should be done. The nose and throat should be kept clean, tobacco and alcohol be avoided, and, if necessary, the tonsils and adenoids should be removed. The voice rest must be complete—the patient should use paper and pencil to make himself understood. The general medical treatment is along usual lines; the local treatment aims at allaying the pain and irritation and includes: menthol, eucalyptol, camphor, benzoinol, lactic acid, or 3 to 5 per cent. formalin glycerin, applied locally once a day or in 1 to 2 per cent. solution by atomizer several times a day.

Edema of the parts is treated by the scarifier; infiltrative lesions may need cauterization, ulcers are curetted and out-growths removed by punch-forceps or curette. The epiglottis may require removal if it interferes with swallowing or respiration or if it sets up annoying reflexes. Removal does not interfere with swallowing.—*Treatment of laryngeal Tb.*, E. E. Edmondson, *Ill. Med. Jour.*, Nov., 1915.

The Tb. Problem.—The fact that the anti-Tb. campaign has not brought results as favorable as might have been expected is due to the slogan "Tb. is an infectious disease," which overlooks the fact that the disease is acquired in childhood and its manifestation in the adult is only a lighting-up process. Isolation of all persons with tubercle bacilli in the sputum would be effective prevention, but this cannot be attained. Hence, the only hope lies in childhood prophylaxis. Since tbc. infection occurs in early childhood, and perhaps in utero, all attempts at prophylaxis are in reality therapeutic. Dr. Karl von Ruck has prepared a vaccine consisting of the watery extracts of the tubercle bacillus which has been given by repeated injection to young children, until their serum shows bactericidal power against the bacillus. The children gain in weight and appetite and do not develop active Tb. The largest number of experiments have been carried out on animals, using some as controls. In the case of animals, some failures were observed, and these have been explained by the existence in the animals of a pseudo-tb. which interferes with the experiment. The vaccine has also been administered to cattle with good results, and this may later solve the problem of the tbc. cow.—*The Tb. Problem*, S. H. von Ruck, *Lancet-Clinic*, Sept., 1915.

Tb. of the Tongue.—The reasons for the infrequency of this condition are: (a) The structure of the lingual mucosa. (b) The natural resistance of striated muscle to the lodgment of the bacilli.

Most cases occur between the twentieth and fiftieth years. The route of the infection is through the blood vessels, by way of the lymphatics, by direct infection, or by extension. It is almost always secondary to Tb. elsewhere.

There are two clinical types. (a) New tissue formation. The lesion is a plaque, gray, elevated, and hard, with no inflammatory reaction around it. It is formed by the grouping of miliary tubercles which may or may not ulcerate. (b) In the intramuscular connective tissue large single nodules are formed. (c) A third, verrucose, type has been described.

The author reports five cases. All were secondary. They were between 20 and 60 years of age. Two were females, three males. None of the cases came to autopsy.—*Tuberculosis of the Tongue, Luigi Durante, Annals of Surgery, LXIII, No. 2, 1916.*

Exercise to Prevent Tb.—The author holds that the present method of fighting Tb. by exterminating the tubercle bacillus is radically wrong, as the bacillus is present everywhere in modern life and the avoidance of infection is impossible. He intends to show that only by curing the predisposition to consumption can the disease be fought. Thereby the soil is made unsuitable for the propagation of the tubercle bacillus, and should the disease be already present, the bacilli will perish.

Predisposition presents three salient features: (1) deficient respiration; (2) deficient circulation and regulation of body temperature; (3) deficient nutrition. These deficiencies are overcome by properly regulated gymnastic exercises.

Sanatorium treatment is condemned, because it is of no further value than to prolong the disease or to cause the patients to die more slowly. Continuous rest impairs the already deficient functions of respiration and circulation. Walking is a bad form of exercise if taken as a therapeutic means. In consumptive patients, especially in advanced cases, the proportion between pulse rate and temperature is disturbed, and a high temperature with a comparatively slow pulse or a fairly normal temperature with an abnormally fast pulse is frequently found. After a few weeks of gymnastic treatment this disturbance is disposed of. Fever is no bar to gymnastic treatment, but good care must be taken that the patient is not strained or overworked. Proper diet and hydrotherapeutic measures are beneficial.

The exercises are those of the Liny system arranged in three groups.—*Consumption and Its Cure by Physical Exercises, by Filip Sylvan, M.D. E. P. Dutton, New York, 1915.**

Tb. in U. S. Army.—The general rate of Tb. for the entire U. S. Army during the year 1914 has been reduced from 3.66 last year to 3.35. The rate for the U. S. stations was reduced from 3.07 to 2.69. In the Philippine Islands the rate has

increased, also in China, where it almost doubled. In Alaska, Hawaii, Panama, and on transports the rate has decreased. The largest number of cases occurred during the first year of service. During the years 1905-1914 the admission and death rates for both officers and enlisted men were: lowest, western department; highest, central and southern departments.

At the U. S. A. Sanatorium, Fort Bayard, New Mexico, there were 437 cases of pulmonary Tb. during the year. Of 437 completed cases 26 were apparently cured, 50 arrested, 19 apparently arrested, 76 quiescent, 123 improved, 83 unimproved, and 60 died. Over one-half had important complications.—*Annual Report of the Surgeon-General, U. S. Army, 1915.*

Tb. in the Army during the War.—An increase of Tb. during the war is to be expected because of the diminished resistance caused by the increased mental and physical strain. External exposure practically plays no part in the causation of active Tb. In the majority of cases it is an auto-reinfection from more or less latent tbc. lesions either in the tracheo-bronchial nodes or in the lungs, which existed before the war. Among 85 dead soldiers Monckeberg found Tb. present in 27; in 5 it was the cause of death. Of the 22, 19 had old lesions. Hematogenous extension is rare, and occurs only in advanced cases. The increased bodily exertion may cause the entrance of virulent bacilli into the blood with consequent metastases.

There is no record of traumatic bone or joint Tb. as result of gunshot wounds. Primary Tb. in connection with lung injury is also very rare. But these injuries increase the predisposition to the disease. It seems also that typhoid immunization favors the exacerbation of old lesions. Out of 62 immunized soldiers 46 developed active Tb., 29 within 4 weeks. Hereditary constitutional anomalies increase the danger of acquiring Tb.

On the other hand, the war also provides circumstances increasing the resistance against Tb. in the steady outdoor life, the increased muscular energy, etc.

The prognosis is unfavorable in hematogenous miliary extension; better in mild lymphatic extension. It depends on the degree of extension and character of the lesions before the war, on the degree of resistance of the individual, and on the ability to separate early the active from the inactive cases. Early recognition of fresh exacerbations and their speedy return home to an institution increases the possibility of a cure. The determination of whether a case is active or inactive should proceed with great care, after repeated observations, and by the aid of all means at our disposal. Tuberculin tests cannot with certainty be used for that purpose.

The treatment of reactivated war Tb. is physico-dietetic. It begins with an intensive rest period, followed by exercise. Drugs play an insignificant rôle. The cure is best carried out in institutions under specially trained physicians. Tuberculin-therapy in proper dosage and in favorable cases is well worth using, though the results are not striking. Cases with mild suspicious lung symptoms are subjected to a short climatic treatment in a sanatorium, and frequently are so rapidly improved that they can resume field duty. Institu-

tional treatment is also favorable in a great many cases of active Tb. Of the cases discharged from the author's institution, 22.7 per cent. were suitable for field work, 17.9 per cent. for garrison duty and soon able to resume field duty, 56 per cent. for garrison duty only, 3.4 per cent. unfit for service.—*G. Schroeder, Zeitschr. f. Tb., Bd. 24, H. 5, 1915.*

Active and Inactive Tb.—Schroeder discusses in the sixteenth annual report of his private sanatorium the all-important, but still mooted, question of active and inactive pulmonary Tb. This is a relative, not exactly definable term. The greater our experience, the more will we approach anatomical conditions in our diagnosis. This requires more or less prolonged observation. This includes a searching anamnesis, a consideration of the constitution, and a painstaking examination, especially an exact temperature record with the patient at rest and after exercise. The tuberculin tests have no differential value. Even a focal reaction after a subcutaneous probatory injection does not prove that the reacting focus was active before. The cutaneous test is of value when repeatedly negative. In the tuberculin sensitiveness of the skin, ascertained after the method of Ellerman-Erlandsen, we have a fair prognostic guide, e. g., a patient with hardly any sign of active Tb., but with a high tuberculin sensitiveness of the skin, gives a good prognosis and can be expected to work.—*XVI Jahresbericht d. neuen Heilanstalt für Lungenkranke zu Schoenberg, Germany.*

Etiological Classification of Symptoms.

—The usual stigmata are not necessary for the diagnosis of early Tb. Most patients are suffering from renewed activity in an old focus or from extension to new areas. The attacks which are frequently characterized as grippe, bronchitis, neurasthenia, etc., should, when repeated, lead us to suspect Tb. Some patients do not give a history of previous disease or prodromes. This sudden explosive type of Tb. is usually overlooked.

The early symptoms according to their etiology fall in three groups: (1) those caused by toxins; (2) those of reflex origin; and (3) those due to the tbc. process *per se*. Some of the symptoms have a double etiology.

(ad 1) Malaise, run-down feeling, lack of endurance, nervous instability, loss of weight, indigestion, night sweats, and fever. The temperature curve is of great importance for early diagnosis.

(ad 2) Hoarseness, indigestion, loss of weight, pains in chest (particularly in shoulders and upper parts of lungs), tickling in larynx, cough, rapid pulse, flushing of face. The chest pains are more common in old lesions. They usually run in the nerves supplying the shoulder girdle, the interscapular and upper intercostal areas.

(ad 3) Frequent and protracted colds, hemoptysis, pleurisy, fever, sputum. Either of the first two, plus one or more of the symptoms of this group, especially with fever and a positive cutaneous test, allow a positive diagnosis of active Tb.—*Classification of symptoms of early pulmonary Tb. based on their etiology, F. M. Pottenger, St. Paul Med. Jour., Vol. 17, No. 1, 1915.*

* This book of 203 pp. may be ordered through the *Journal of Outdoor Life*, 287 Fourth Ave., New York, for \$1.25 postpaid.

